Final Report of the Sustinet Childhood and Adult Obesity Task Force

July 2010

I. Summary

The Sustinet Task Force on Obesity is pleased to present its recommendations to address obesity among Connecticut's residents. Just over 21% of state adults are considered obese, making the state the "second least obese" nationwide. On the other hand, 12.5% of Connecticut youths aged 10-17 are obese, compared to the national average of 12%.

Treatment of obesity is an expensive and extended process, requiring significant investment of health care dollars. The Task Force concluded that increased prevention efforts at the statewide policy level will benefit both those who maintain a healthy weight as well as assisting those who have encountered difficulty in doing so. Furthermore, the increasing prevalence of obesity in children has only recently begun to come to the forefront.

To address the issues particularly facing pediatric populations, the Task Force recommends a broad range of actions, including creating a state level council to focus on policy development and coordination; emphasizing best practices among providers; improving the nutritional environment in schools and child care facilities; and ending food marketing directed at children. Within these recommendations, the Task Force notes that Sustinet should include coverage for obesity-related services such as extended nutritional counseling and parent education on healthy eating.

II. Purpose and Mission of This Task Force

A. Charge to the Task Force

Section 16 of Public Act 09-148 directs the Task Force to:

- 1. Examine evidence-based strategies for preventing and reducing obesity in children and adults and develop a comprehensive plan that will effectuate a reduction in obesity among children and adults
- 2. Develop recommendations in the context of overall SustiNet goals:
 - improve the health of state residents
 - improve the quality of health care and access to health care
 - slow the growth of per capita health care spending
 - promote effective management of chronic illness
 - promote effective preventive care
 - reduce racial and ethnic disparities as related to health care and health outcomes
- 3. Submit a report containing its recommendations to the SustiNet board by July 1, 2010.

B. Members of the Task Force

The Task Force is comprised of co-chairs Lucy Nolan (End Hunger, CT!, Hartford) and Marlene Schwartz, Ph.D. (Rudd Center for Food Policy and Obesity, New Haven) and four members: Christine Finck, M.D. (Connecticut Children's Medical Center, Hartford), Andrea Rynn (Danbury Hospital, Danbury), Jennifer Turner (Girl Scouts of America, Hartford), and Neil Vitale, M.D. (Pediatric Associates of Connecticut, Southbury).

C. Methodology

The Task Force first met on November 6, 2009 at which time a meeting schedule was adopted. Over the course of its schedule of meetings, the Task Force heard presentations from a wide variety of stakeholders. A complete list is in Appendix A.

III. Obesity and Nutrition in Connecticut

A. Obesity in Connecticut

1. Defining And Measuring Obesity

In the field of public health, "obesity" and "overweight" are defined using Body Mass Index (BMI), which is calculated by dividing weight (kg) by height (meters) squared. Table 1 presents the accepted BMI ranges for each weight category. For example, if a woman who is 5'6" tall weighs between 115 and 154, she is in the normal weight range. If she weighs between 155 and 185 she is considered overweight. If she weighs 186 pounds or more, she is considered obese.

Table 1. Weight categories for adults

	ВМІ
Underweight	Below 18.5
Normal	18.5 - 24.9
Overweight	25.0 - 29.9
Obesity	30.0 and Above

The Task Force spent considerable time discussing the positive and negative aspects of using BMI as an index in Connecticut. **The Task Force feels that BMI is not a sufficient measure to diagnose individual obesity**. For example, BMI may overestimate body fat in athletes and others who have a muscular build, and it may underestimate body fat in older persons and others who have lost muscle mass.

It is important to understand that when assessing children between ages 2 and 18, the 25 and 30 cut-off points for overweight and obese are not appropriate. Instead, it is necessary to compute the percentile for the child's BMI based on age and sex. The CDC provides tools to do this on their website:

http://www.cdc.gov/healthyweight/assessing/bmi/childrens bmi/about childrens bmi.html

This method compares a child's BMI to the normal range of children's BMIs of the same age and sex. Therefore, if a child is at the 85th percentile, it means that he/she is larger than 85% of all children of the same age and sex. This is the standard cut off for being considered overweight among children. If a child is at or above the 95th percentile, he or she is considered obese. **The** Task Force feels strongly that the diagnosis of overweight or obesity should only be provided by the child's health professional, who has access to the child's measurements over time. For example, there is a difference between a 10 year old child who has been in the 70th percentile every year since age 5 and a child who was in the 30th percentile between ages 5 and 9, and then at age 10 suddenly climbs to the 70% percentile. Consistent growth along the same percentile line of the chart suggests that the child is growing appropriately. Sudden jumps, either up or down, suggest that there may be a problem in the child's eating or activity level. These circumstances require the attention of a health professional who can do a thorough examination of the child and learn more about the child's historic and current eating and activity patterns. Once the professional has this information, possible interventions may be recommended.

While the Task Force acknowledges the limitations of BMI for individual diagnosis, it feels that BMI is a good measure for the purpose of tracking weight in a population to examine public health trends. BMI is reliable and nationally standardized, which will allow for comparison between Connecticut and other states as well as within geographic regions within the state.

2. Rates Of Overweight And Obesity In Connecticut

National data from the Centers for Disease Control and Prevention indicate that Connecticut has the lowest adult obesity prevalence among the six New England states; however, that does not mean that we do not have a serious health problem.

¹ Currently **59.7% of Connecticut adults are overweight or obese.**Specifically, **21.4% are obese (BMI = 30 and above) and 38.3% are overweight (BMI = 25-29.9)**. The trend over time is extremely concerning; the rates of obesity among adults in Connecticut have **increased by 71% since 1995**. ^{II}

Connecticut residents experience a wide range of levels of socioeconomic status, which has resulted in health disparities across the state. Rates of obesity are significantly related to income nationally, and this relationship is very evident in Connecticut. Rates of obesity vary by income (19% in the top-income bracket vs. 28% in the lowest) and education (from 17% to 34%). The differences in rates of obesity and overweight among adults are particularly pronounced when comparing different levels of education; 55% of adult college graduates are overweight or obese, compared to 65% of people who only finished high school.ⁱⁱⁱ

In 2009, the adult obesity rate was 35.4 percent among Blacks and 26.4 percent among Latinos, compared with 20.7 percent among Whites. Washington, DC and Mississippi had lower rates than Connecticut for Black and Latino residents, respectively.^{iv}

In 2007, rates of childhood overweight (BMI percentile >=85 - 94.9) were 13.3% and rates of obesity (BMI >=95 percentile) were 12.3%, **meaning** that a total of 25.6% (or put simply, more than 1 out of 4) of our children are at risk for weight related medical complications. As with adults, socioeconomic and racial / ethnicity status make an important difference in risk of obesity. In Connecticut, rates of childhood obesity vary substantially by race: from 9.6% among white children to 17.5% among Latino children and 21.1% among African American school children. In other words, in our state, Latino children are almost twice as likely and

African American children are more than twice as likely to be obese compared to white children. Obesity is clearly a health disparity issue that must be addressed.

3. Health Care Costs

According to published research, obesity-related medical expenditures in Connecticut adults are \$1.08 billion each year (in 2009 dollars). All taxpayers are affected. Public funds such as Medicare and Medicaid pay for more than three quarters of all adult medical expenditures in Connecticut attributable to obesity (\$530 million per year by Medicaid and \$311 million by Medicare). This is considerably above the national average of 52% for the share of Medicaid and Medicare expenses in all obesity-attributable health care costs for adults. Clearly, state efforts to prevent obesity will have substantial financial benefits for the state over time.

4. The Link Between Food Insecurity And Obesity

While overweight and obesity are the result of overconsumption of calories, there is sometimes a paradoxical relationship between being food insecure (i.e., not knowing where your next meal is coming from) and being overweight or obese. When one looks at the economics of our food environment, this relationship makes more sense. Many densely caloric foods (such as fast food, packaged snack foods, sugar sweetened beverages and candy) are significantly less expensive than less caloric but more nutritious foods (such as fresh fruit and vegetables, low-fat dairy products and lean meats). Therefore, someone who has limited money to purchase food may make the logical choice of obtaining the maximum amount of calories for the least amount of money. Further, people who live in low-income neighborhoods and are reliant on public transportation have limited access to full service supermarkets. This makes the healthier options not only less affordable, but also less available to many individuals in our state.

5. Calories in and calories out

The simple point that obesity is a matter of energy imbalance – more calories are taken in than are expended – says everything and nothing at the same time. While it is true that this explains weight gain and loss, the real question is: what is causing people to take in more calories and expend fewer calories on a regular basis?

In the field of obesity treatment and prevention, there has been an ongoing tension between those who study the food side of the equation and those who study the activity side of the equation. Some of the most vocal advocates for

the importance of more physical activity have been members of the food and restaurant industries. Recent research, however, has determined that the changes in food intake that have occurred in the last three decades are more than sufficient to explain the rise in obesity in the United States. Physical activity is recommended for reasons that go far beyond weight status – being fit is associated with many major health benefits, and there is a growing body of research indicating that children who are physically fit and active do better academically. There is also a very strong literature indicating that the best way to maintain weight loss once it has occurred is frequent physical activity. In light of the research in this area, the proposed policies in this report address both calories in and calories out, but emphasize the food side of the equation more than the activity side.

B. Food and Nutrition Programs in Connecticut

1. Supplemental Nutrition Education Program (SNAP; formerly known as food stamps)

Connecticut assists residents in purchasing food through a range of federal nutrition programs. About 7% of the population in Connecticut (or 258,165 people) participated in SNAP in 2009, with average monthly benefits of \$134.60 per participant.* The number of participants increased 15% from 2008. In July, 2009 SNAP income guidelines for SNAP were raised to 185% of the Federal Poverty Level (FPL) from 135% FPL allowing more people to access the program. Currently, over 333,000 Connecticut residents enrolled in the program. The federal government also provides funding of \$4 million for an education component of SNAP, called SNAP-Ed. In our state, the DPH and the University of Connecticut administer the nutrition education efforts associated with SNAP. A number of programs are delivered to different target audiences, including Captain 5-a-day for preschoolers, the Hispanic Family Nutrition Program, the Senior Nutrition Awareness Project, Husky Nutrition Education and SNAP-Ed Food Security, which serves people who participate in emergency food programs.

Women, Infants and Children (WIC) Program

In 2009, about 60,155 Connecticut children, women and infants participated in the WIC program, receiving average monthly food benefits of \$49.25 per participant.^{xi} Individuals who participate in these programs also benefit from the efforts to have farmers markets in Connecticut accept WIC^{xii} and SNAP benefits.^{xiii}

Farm-to-School Program

In Connecticut, there is a growing Farm-to-School Program organized by the Department of Agriculture. At this time, over 96 schools and districts participate by obtaining produce or beef from local farmers. The most popular items are apples, pears, peaches and berries. Not only does this program give children the opportunity to taste farm fresh foods it acts as an economic stimulus for farmers to keep producing healthy foods.

National School Breakfast and Lunch Programs

Connecticut ranks last in the nation for the number of schools offering breakfast and 40^{Th} for the number of eligible children receiving a breakfast at school^{xiv}. Due to a grant program instituted by the legislature in 2006, more children are receiving breakfast when they eat after the school day begins (schools that participated in the grant program to feed children in the classroom, or after the school day began, saw a three-fold increase in the number of children fed).^{xv} Eating breakfast at school increases student's attention, ability to learn and test scores.

The National School Lunch Program began during the Second World War when the government realized that the boys enlisting were not nutritionally fit. Since that time, the School Lunch Program has been instrumental in assuring children receive at least one nutritional meal during the school day. There are three categories for reimbursement to schools: free (a family's income is no more than 130% of the FPL), reduced (a family's income falls between 130% and 185% of the FPL), and regular priced (for those families with incomes above 185%). If a family receives SNAP benefits, their children are categorically eligible for free meals at school. Connecticut has strict beverage guidelines for schools and addresses the foods that can be sold alongside the meal through the voluntary Healthy Food Certification, as outlined by the State Department of Education. Healthy Food Certification sets nutrition standards for school meals; schools choosing to obtain this certification receive enhanced lunch funding. Both the School Breakfast Program and the National School Lunch Program are administered by the Connecticut State Department of Education for the United State's Department of Agriculture.

Summer Feeding Program

This program provides free meals (breakfast and/or lunch) to children when school is out, ensuring a healthy and happy summer for all kids 18 and under. Like the National School Lunch Program, Summer Food is funded by the USDA. In 2009 there were 468 summer feeding sites in Connecticut with an

average daily attendance of over 33,000 children at which more than 1.5 million meals were served. Availability is either at an open site at which any child under age 18 may eat, the location of which is determined by neighborhood income, or at a closed site such as camps where applications are collected to assure a family is eligible for the federally funded meal(s). The Summer Feeding Program also allows for a safe area for children to recreate during the summer months and is often paired with summer school, camps, and Parks and Recreation activities allowing for physical activities.

IV. Guiding Principles

Figure 1 illustrates the Ecological Model of Obesity, which identifies the wide range of influences that lead to the behaviors that contribute to obesity and other health consequences. Philosophically, the Task Force believes that the role of the state is to focus on the larger influences that can be changed, with the greatest emphasis on the highest level influences: **Organizational**, **Physical Environment** and **Policies and Incentives**.

An Ecological Model of Obesity (NHLBI) Influences Health **Behaviors** Outcomes **Biological & Demographic** Age, sex, race/ethnicity, SES, genes **Psychological Eating** Beliefs, preferences, emotions, self-efficacy, intentions, Dietary patterns, pros, cons, behavior change skills, body image, nutrient intake motivation, knowledge Social/Cultural Social support, modeling, family factors, social norms, cultural beliefs, acculturation Sedentary **Behaviors** Weight, TV, computer use, Fat, & <u>Organizational</u> driving Distribution Practices, programs, norms, & policies in schools, worksite, Health care settings, businesses, community orgs **Physical Environment** Access to & quality of foods, recreational facilities, cars, **Physical** Risk Factors **Activity** sedentary entertainment; urban design, CVD, transportation infrastructure, information environment Diabetes, Recreation transportation, Cancers. occupation, domestic Policies/Incentives Cost of foods, physical activities, & sedentary behaviors; incentives for behaviors; regulation of environments Developed for the NHLBI Workshop on Predictors of Obesity, Weight Gain, Diet, and Physical Activity; August 4-5, 2004, Bethesda MD

Figure 1

At the first meeting, members reviewed the differences between Policies and Programs and the definition of an optimal default (see Appendix B). As the task force worked to formulate recommendations, a number of guiding principles were identified to help focus these efforts. The Task Force hopes

that these principles will steer future state efforts as well as those recommended this year.

1. As a state, we need to move beyond education and encouragement and actively promote policy changes that will make the healthy behavior the default behavior.

A common belief is that food decisions are made based on knowledge and conscious intention. As researchers study human eating behavior, however, we are learning that we are highly influenced by the nutrition environment – often in ways that are outside of our awareness.** One way to address this problem is to educate people and implore them to continually fight against an environment where foods high in sugar, salt, and fat are inexpensive, highly accessible, and heavily marketed. Another strategy is to change the environment, so that the healthy foods are inexpensive, accessible, and marketed. In other words, it should require little effort to eat well and great effort to eat poorly, instead of the current situation, which is the other way around.

 Results-Based Accountability (RBA) should be used as a tool for state government to set goals and strategies, coordinate actions, and determine impact.

The concept of RBA has already been introduced in Connecticut for some state programs (see http://www.cga.ct.gov/2010/rpt/2010-R-0135.htm). We recommend that RBA should be used throughout the process of state actions for departmental planning, program implementation, and the evaluation of outcomes, including the use of the "report card" format when obesity related efforts are reported to the Appropriations committee.

3. State efforts must be coordinated, tracked, and evaluated by a central body that is supported by highest levels of state government.

Through the process of collecting data on what it already happening in the state that is relevant to obesity, the Task Force learned of many different types of initiatives, including policies, programs, advocacy efforts, and opportunities for federal and foundation funding. It became clear that no one group was given the authority or resources to make sure that all efforts were optimally synergistic. Further, in order to effectively use RBA, the state needs valid outcome measures specifically related to child and adult obesity. Different types of data are currently collected in different agencies, but these

data are not all pulled together in a manner that would allow a comprehensive assessment of state-wide obesity efforts.

4. Food security, good nutrition, weight stigma, and adequate physical activity need to be examined in a cohesive manner across the state.

The Task Force feels strongly that every effort must be made to ensure that new policies do not have unintended consequences. Food policies that are aimed at decreasing excess caloric consumption may concern advocates who are work to ensure that people have enough to eat. These policies can also raise concerns about increasing weight stigma, discrimination and prejudice. Certainly, any policy that will impact children needs to be evaluated by individuals with a range of perspectives and the child's overall well being as the key outcome. After much discussion, the Task Force feels that conflict is avoidable, and in fact, we feel that there are many responsible policies that can promote better nutrition and more physical activity and positive self-esteem and body image for youth and adults.

5. Ensure that all new policies or programs for children in the schools are designed to promote health for everyone; do not single out overweight children for interventions.

On a related note, the Task Force feels strongly that any new policies in Connecticut must be designed in a way that do not promote negative body image and unhealthy dieting practices, especially among adolescent girls, who are at highest risk of developing clinical eating disorders. There is an emerging area of research on strategies and messaging in obesity prevention that addresses this concern directly, and future efforts in the state should consider these recommendations.xviii The key point is to keep the messaging focused on healthy behaviors for everyone - not simply weight loss for overweight individuals. In schools in particular, it is important not to single out overweight children for interventions, but rather, focus on improving nutrition and physical activity for the entire student populations. For example, promoting calorie-restriction though activities such as a "Biggest Loser" competition for children is not recommended. Instead, the state should promote general messages, as have been used by many other states, such as "5-3-2-1-0: FIVE fruits and vegetables, THREE low-fat dairy, less than TWO hours of screen time, at least ONE hour of exercise, and ZERO sugar sweetened beverages."

6. Efforts should be designed to reduce racial and ethnic health disparities in the state.

There are significant health disparities among racial and ethnic groups nationally, and as noted earlier in the status of obesity in Connecticut, we experience these disparities here as well. Reducing disparities will require a broad view of the causal factors leading to obesity in the first place, most prominently, the role of socio-economic status. The Task Force's recommendations to combine anti-hunger and obesity prevention policies should move the state in the right direction by increasing access and affordability of healthy foods for all residents. Improving the nutritional quality of all of the government subsidized food programs, especially in child care facilities and in schools, will improve the diets of low-income children and thereby reduce one source of health disparities.

7. Need to focus on prevention and treatment; and support health professionals to engage in both.

There are two obesity related public health problems – the first is how to help the individuals who have already developed the condition, and the second is how to prevent more people from becoming obese. Both efforts are important and both efforts require resources. Health professionals have an important role in both efforts. From an economic standpoint, it is certainly more efficient to spend money on prevention, so that is where we recommend the majority of the state initiatives focus. However, people who have already become obese are entitled to compassionate and state-of-the-art treatment.

8. Best practices should be identified and implemented in an ongoing manner.

In the coming years, it is likely that much will be learned about the effectiveness of different public health strategies to improve the nutrition and activity environment and promote healthier behaviors. It is critical that Connecticut remain flexible and open-minded as new findings emerge, and continually challenge all relevant parties to push themselves to the highest standards of practice and policy.

V. Recommendations

Recommendation #1: Convene statewide policy making and oversight groups; move towards achieving statutory authority

1.(a). The current Childhood Obesity Council must move forward immediately.

As noted below, we recommend that the current Childhood Obesity Council should be strengthened and turned into a permanent council with statutory authority. However, in the meantime, we strongly recommend that the existing council be reactivated so it can continue its productive line of work. Specific recommendations that can be addressed immediately include:

Tracking and Communication

- Create an information packet on all relevant state agency programs.
- Update materials and distribute them widely.
- Plan a council-led roundtable of all local childhood obesity coalitions.
 The purpose is to create partnerships and coordination among disparate efforts not just among state agencies but also among the growing number of interested municipalities and nonprofit groups. There are local coalition efforts in Hartford, New Haven, Danbury, Stamford, Torrington and elsewhere that are growing stronger by the week.
 Everyone is chasing federal and private dollars to their own benefit, but a coordinated team would benefit all.
- Engage in a cross-agency RBA process to set goals, share agency plans and coordinate actions.
- Add the non-governmental members the group committed to add last spring. Establish the action teams announced in the spring of 2009 but which were not implemented on (1) data, (2) medical home, (3) menu labeling, (4) school/community and (5) policy development.
- Revisit the BMI proposal, re-assess other states' experiences, and reintroduce the bill.
- Incorporate emerging best practices into inter-agency projects through master contracting and memoranda of understanding.

- Conduct a regional listening tour in coordination with local obesity prevention coalitions
- Engage all 10 state agencies to analyze each of the 116 policy recommendations of the 2008 conference in a formal policy review (see http://www.cga.ct.gov/coc/obesity_forum.htm).
- Develop a public outreach campaign, starting with donated publicservice announcement time as the Commission on Children and Connecticut Conference of Municipalities did in 2006.
- Conduct a leadership survey of other states' obesity coordination efforts.

Grant Coordinating

- Apply for foundation funds on behalf of the Council.
- Serve as a team to prepare cross-agency applications for federal funding through the federal stimulus and other opportunities. Our state will stand a better chance with a multi-agency application and the coordinating strength of its Childhood Obesity Council.

Cost: Minimum \$20,000 a year for council operation. Additional funding if the council assumes grant-making authority.

Leaders: Council chair with support from legislators and executive branch leaders.

Timeline: Immediate action by existing Childhood Obesity Council to achieve the 13 objectives listed above. Establishment of a statutorily authorized council would require action in the next legislative session.

Impact: Improved government response to obesity issues, establishment of a council that has statutory authority and cannot be compromised by executive branch inaction.

Measurable indicators for RBA:

- 1. The amount of communication that occurs throughout the state about obesity related efforts number of people reached.
- 2. The amount of grant funding brought into the state for obesity related programs and policies

Recommendation #1b: Create and Support a Permanent Council on Childhood and Adult Obesity.

Why is a permanent council with statutory authority needed?

The problem of obesity cuts across all age groups and the missions of many state departments. While the Department of Public Health and the Department of Education have the most direct influence over relevant policies (including the federal food programs, licensing child care centers, regulating restaurants), other departments play important roles. Examples include the Department of Agriculture (e.g., Farm to School efforts); the Department of Transportation (e.g., "complete street" initiatives), and the Department of Social Services (e.g., Supplemental Nutrition Assistance Program [SNAP] and The Emergency Food Assistance Program [TEFAP]).

The work that has been done by the existing Childhood Obesity Council has been extensive and noteworthy, as the Task Force learned from presentations by Thomas Brooks and Mario Garcia. To be more effective, however, this council must be expanded and provided with the authority they need to promote further changes in the state. The council will need adequate funding to support its day to day activities as well as authority to manage additional funding provided within the state for state-wide obesity related initiatives.

The Permanent Council on Child and Adult Obesity could be modeled after the Connecticut Medicaid Managed Care Council. As a collaborative body of legislators, consumers, advocates, health care providers, and state agencies, the Obesity Council can advise both state agencies and the legislature on strategies to promote environmental change and better access to health care for currently obese individuals.

Who should be members of the permanent council?

- Legislative branch members: It is critical that legislators, not just their designees, participate in this council. We recommend appointing members from the following committees: Select Committee on Children, Public Health, Human Services, Education, Environment, and Transportation. We also recommend that the Commission on Children continue as a council member.
- Executive branch agencies, including DPH, OPM, DCF, SDE, DOA, DSS, DEP, and DOT.
- Advocacy and other non-governmental organizations:
 Connecticut already has a number of active organizations that work

directly on issues relevant to obesity policy. Examples include: End Hunger, CT!, Action for Healthy Kids, the Connecticut Dietetic Association, CT Association for Health, Physical Education, Recreation and Dance, CT Food Policy Council, Connecticut Public Health Association, School Nutrition Association of Connecticut, and state chapters of the American Academy of Pediatrics, American Cancer Society, American Heart Association, and AARP.

- School and Community Representatives A school superintendent, parent, young person, zoning expert, expert on parks and recreation, representative from youth-focused groups, such as the Girl Scouts.
- Academic researchers and institutes: Some examples include the CT Public Health Policy Institute and the Rudd Center for Food Policy and Obesity.

Core functions of the Council:

- Track national and state efforts. Due to the First Lady's childhood obesity initiative, this issue has gained national exposure and keen interest from the federal government. The Council will be responsible for tracking policy efforts occurring in other states and at the national level so that Connecticut can stay informed and prepared to move forward quickly as new effective strategies emerge. Further, the council will be responsible for maintaining current information on obesity related local efforts throughout the state and screening the landscape to see what resources already exist.
- Communicate relevant information throughout the state. The Council will use in-person meetings, webinars, newsletters, and e mail alerts to keep all stakeholders informed and up to date on what is happening in Connecticut and outside the state to address obesity.
- Coordinate grant applications. There is federal money available to address obesity from a number of agencies and Connecticut has the potential to obtain significant federal funds if we can coordinate our efforts.
- Guide state administrative and legislature policy. As the task force learned, there are dozens of different policy strategies that have been introduced nationally. The White House Task Force Report lists over 70 recommendations. One critical role of the Council will be to sift through this information and strategically choose appropriate measures for Connecticut based on our needs and resources.

Recommendation #2: Statewide Surveillance of Key Health Indicators

One of the guiding principles of the Task Force is Results Based Accountability. In order to examine the impact of obesity related policies, we need accurate and ongoing assessments of the outcome variables, namely obesity rates. Most researchers acknowledge that while the ultimate goal is to decrease the prevalence of obesity within a population, it is highly unlikely that any one initiative will result in a statistically significant decrease in the short term. Therefore, it is critical to have not only this long-term outcome, but also several more proximal outcomes that are assessed regularly. Levels of physical activity and eating behaviors are the most relevant variables. The DPH has access to data collected by the CDC on both adults, through the Behavioral Risk Factor Surveillance System (http://www.cdc.gov/brfss/index.htm) and children, through the Youth Risk Behavior Surveillance System (http://www.cdc.gov/HealthyYouth/yrbs/index.htm). These national surveys will provide a general index of these behaviors for our state and will allow us to compare progress with other states. It will be important that DPH obtain adequate support from schools to ensure that a representative sample is obtained for data collection.

In order to have the best data on childhood obesity rates within the state, we recommend that electronic health data reported to a statewide HIE or other statewide entity include children's BMI, and that the resultant data become a resource for researchers and health status monitors. There have been previous legislative efforts to require statewide collection of BMI data from students. The Task Force spent considerable time discussing the complicated issues regarding confidentiality, appropriate use and other concerns with this type of initiative. We recommend that the CT State Department of Education (SDE) add BMI data as a health index to the state database that is kept on all students. The SDE would be the only agency with access to the identified data, but de-identified data could be shared with other agencies, especially DPH to be added to state level tracking of chronic disease and other important health indices.

Ideally, the SDE database would include other key health indicators such as (a) food security, (b) dietary quality, and (c) physical fitness. Fortunately, fitness is already measured and reported in this database. Other possible indicators are: (a) diabetes, (b) tobacco use, and (c) an index of cardiovascular health (blood pressure). The possibility of streamlining data

collection and including asthma in this database, instead of the current system of reporting asthma directly to the DPH, should be discussed.

This database could be used to create an online tracking system (similar to the SDE's school profiles) to monitor changes at the district and school level. It can be used to inform decisions about grant funding, services, and strategic economic incentives. State-level surveillance of key environmental factors that are documented as important predictors of health may be tracked as well. These include adequate nutritious food access, physical activity access, and the strength of policies that promote access to nutrition and physical activity.

Timeline: Summer 2010 – Determine wither the legislature must approve collecting these data, or whether the Commissioners of Education and Public Health can decide to implement this program. Fall 2010 – Determine the technical needs.

Cost: \$500,000 one time cost for new computers and software for any school nurses who do not currently have them. \$100,000 annually for one research position shared between SDE and DPH to analyze the data and connect it with local policies and programs.

Impact: The ability to track rates of overweight and obesity among children throughout the state in an ongoing manner. Will permit the use of RBA for all state programs and will allow tracking of racial and ethnic disparities over time.

Measurable indicators for RBA:

- 1. Baseline rates of overweight and obesity throughout the state
- 2. Findings reported on how these rates change over time and are linked to local initiatives

Recommendation #3: Promoting Best Practices Among Health Professionals

Health professionals are on the front line in the effort to decrease obesity; however, many clinicians feel that they do not have the tools and resources to do the best job possible. In reviewing some of the recent literature, certain trends have been noted. First, while there is increasing awareness of childhood obesity, there is also a persistent belief that effective treatment options are limited. The Journal of the American Board of Family Medicine^{xix} conducted a

survey of Family Physicians and found that while 71% were familiar with BMI measurements, only 41% knew the current recommendations for overweight. Further, only 45% calculate BMI at every well child visit >2 years of age. Of concern, only 45% of physicians that counseled families felt the counseling was effective and <55% knew of resources to aid in overweight management.

In Connecticut, there is a need to provide support and resources to health professionals throughout the state to help them address obesity for both adults and children. There are individual clinics around the state that provide group cognitive-behavioral therapy, nutrition education, physical activity, and family support designed to help treat obesity, but the insurance coverage for this treatment is inconsistent and availability is limited due to cost constraints. Sustinet can help overcome these barriers by forming a network of health professionals to track the available treatments and programs, communicate throughout the state through state-wide groups such as the CT chapters of the American Academy of Pediatrics and the American Academy of Family Practice, help track the outcomes from programs throughout the state and provide adequate insurance coverage for empirically validated treatments and programs.

Bariatric surgery is the only treatment for severe obesity with good long term weight loss outcomes. The Proceedings of the Nutrition Society journal reports that non-surgical medical therapy for severely obese children produces no more than 10% weight loss and surgery for childhood obesity "remains the only effective therapy. Bariatric surgery is cost effective, and health providers should embrace the development and rapid expansion of services." At present, there is no mortality reported occurring from adolescent bariatric surgery. There are several options including gastric sleeve, laparoscopic banding, and roux-en Y gastric bypass. Most surgical procedures boast a 70% reduction in excess weight loss at 5 years. All procedures cause dramatic improvement in co-morbidities. Originally, the recommendations for the requirements for adolescent surgery were conservative and much stricter than the NIH guidelines for adults; recently however, a movement has been made to utilize the same criteria for adolescents as adults.

While the Task Force acknowledges that adolescent bariatric surgery is an extreme measure compared to other types of obesity treatment, we feel that Sustinet should carefully consider coverage for adolescent bariatric surgery. There is evidence that early surgical intervention will save money from future co-morbidities. Coverage is also necessary for concurrent supportive treatment: nutritional support, physical therapy, psychological support for the adolescent and the family, and social services. Currently Medicaid and Husky

programs do not adequately cover these services. Typically Medicaid will not reimburse for ongoing nutritional support especially for children who are "only" overweight. An optimal solution would be to negotiate package rates with payors, which would cover all of the services necessary to optimally treat these adolescents. Surgical intervention needs to be covered including cost of the devices (i.e., band) and early referral to centers performing these procedures should be advocated.

Specific recommendations:

- Create and maintain a database of treatment options throughout the state for use by health professionals and consumers. This can include educational tools (e.g., videos for families, toolkits for office providers), and a "hotline" for an initial family consultation with an expert on community resources who can connect the family with local programs and providers.
- Develop model of care for children that uses empirically supported treatments.
- Ensure that physicians and patients know what treatments are already covered under all plans. Some private plans do have coverage for obesity treatment, but patients and physicians may not be aware of what coverage they have.
- Ensure that Sustinet adequately covers all empirically supported components of obesity treatment for children and adults, including nutritional counseling, parent education (especially for early childhood years), and long term support for bariatric surgery patients and others who have achieved weight loss. Coordinate efforts to obtain insurance coverage from other companies in the state.
- Fund a peer education network for pediatricians as a two-year pilot program at \$130,000 per year. Assess impact on level of care received by patients and weight status of patients after two years.
- Expand efforts to promote and sustain breastfeeding. Connecticut's support for breastfeeding is evident through legislation that creates workplace protections for women to express milk and to breastfeed as needed. In 2006, the percentage of children ever breastfed in CT was 75%, just above the US average of 74%. The percentage of babies breastfed through three months was 35% in CT compared to 22% across the country. Connecticut's performance against Healthy People

- 2010 targets for initiating breastfeeding is encouraging, but continuing support is needed to increase rates at three and six months.
- Support hospitals' efforts to obtain a *Baby Friendly Hospital Initiative*. The BFHI designation is the "gold standard" for hospital practices that support breastfeeding. Hospitals must demonstrate compliance with standards for staff training, written policies and procedures; and lactation initiation, counseling and support. Three Connecticut hospitals have achieved this designation.*
- In collaboration with state or national obstetrics and nutrition experts, create and disseminate best practices for obese pregnant women.
 These recommendations would provide practical recommendations for maternal health providers about strategies to address the links between obesity and poor birth outcomes, as well as long term health implications for the mother and, according to emerging research, for the child as well. Sustinet should cover prenatal education services generally and ensure that service areas include motivational counseling about nutrition and prenatal exercise.

Recommendation #4: Improve the nutrition environment in schools and day care facilities

- 1. Breakfast promotion:
 - a. In-school breakfast should be provided in any school that has 40% or more free/reduced lunch students. State funding is needed to support this. The proposed Institute of Medicine standards for school breakfast should be used to ensure that this meal does not add excess sugar and fat to children's diets.
 - b. Social media campaign to promote breakfast in schools and at home.
- 2. Healthy Food Certification

40% of districts have not yet participated in this program. The State Department of Education (SDE) should contact the school board in each non-participating district, reiterate the potential funding increment, and request information on why the district chose not to participate.

3. School Wellness Policies

Hire researchers for SDE to work with school districts to re-evaluate their school wellness policies and provide "report cards" for the districts and the public.

4. Improve child care environment

- a. Coordinate efforts between SDE and DPH to strengthen Child and Adult Care Food Program (CACFP) standards to meet New York State's new standards, and ensure implementation through licensing and state monitoring.
- b. Require limits on the use of video and computer screens in all licensed child care facilities per the American Academy of Pediatrics guidelines: under 2 years old no screen time; over 2 years old no more than 2 hours a day.

5. After-school programs

- a. Identify policy levers to improve access and quality of after school programs.
- b. Promote joint-use agreements between schools and community groups to increase the availability of space for physical activity for children in the afternoons and evenings.
- 6. Require daily PE in K-12
 - a. Review the policies and procedures recommended by the National Association for Sports and Physical Education and learn from the experience of Pennsylvania, which passed legislation in 2010 requiring PE.

Recommendation #5: Reduce Unhealthy Food Marketing to Children

Many national groups are attending closely to the problem of unhealthy food marketing directed at children. The Institute of Medicine has created reports on this topic and the food industry has created initiatives to self-regulate food marketing to children. The effectiveness of this self-regulation is questionable, due to the fact that the food industry itself is defining "healthy food" and "child-directed marketing" so loosely that it allows for the status quo to continue in many cases.

One policy recommendation is to determine that schools are "ad free" zones and unhealthy food marketing is not permitted to occur on the school grounds at any time. This would entail removing scoreboards that have branded soft drink or fast food logos, removing book covers or other school supplies that

have branded logos or ads, and would require any fundraising or giftcertificates distributed in schools to be for only healthy products.

Another strategy that has been introduced in Santa Clara California is requiring restaurants to only market healthy foods to children through the inclusion of toys and games in meals. In practical terms, this means that in order to get the toy with a kid's meal, the meal must meet certain nutrition standards.

VI. FUNDING OPPORTUNITIES

In the case of obesity, a penny of prevention is worth a pound of cure. The general fund should be used to promote key prevention policies in the state. There are state agencies that are already getting state funding to prevent and treat obesity. Result-based accountability methods should be used to determine what the state is achieving with these dollars.

The proposed permanent Council on Child and Adult Obesity should track the availability of federal grants through USDA and CDC. With the recent announcement by First Lady Michelle Obama that childhood obesity is her priority, we expect increased availability of funding for community initiatives.

Centers for Disease Control and Prevention

At the present time, one source of potential funding is the CDC, which funds a number of states to implement state obesity plans. We recommend that one of the first actions of the Council is to work with the Department of Public Health to create a competitive application for this funding.

United States Department of Agriculture

In April 2010, the USDA announced the availability of \$11 million in grants through NIFA's Agriculture and Food Research Initiative Human Nutrition and Obesity program to develop effective obesity prevention strategies along with behavioral and environmental instruments for measuring progress in obesity prevention efforts. The program also promotes strategies for preventing weight gain and obesity.

Sugar sweetened beverage tax

A controversial, but innovative strategy to raise revenue for obesity related state initiatives is an excise tax on sugar sweetened beverages. Recent data indicates that Connecticut adults drink on average 1.5 soft drinks and fruit drinks per day, summing to 255 million gallons each year – or 72.2 gallons per

person, including 48.8 gallons of sugar-sweetened beverages (SSBs). A state excise tax of one penny per ounce on SSB would decrease consumption by about 23%. With a state excise penny-per-ounce tax on SSBs, which is approximately a 20% increase in current prices, SSB consumption in Connecticut is predicted to go down in 2010 to 134.7 million gallons, or 37.6 gallons of SSB intake per capita. Tax revenues from a penny-per-ounce tax on these beverages in Connecticut over 2010-2012 would be \$523 million and over 2010-2015 would be \$1.06 billion. XXXVIII

Research on public opinion about SSB taxes indicate that when people know the revenue will be used for health promotion, the majority of individuals are in favor of the tax. There are many possibilities for the use of this revenue, but one that is particularly appealing is to use the money to provide state matched funds for federal grants. That would be an effective way to leverage this funding and ensure that it is used to promote health in the state.

Appendix A

Presentations before the Task Force on Adult and Childhood Obesity:

<u>Shaping a Healthier Generation: Successful State Strategies to Prevent</u>
<u>Childhood Obesity</u>. (National Governors Association Center for Best Practices)

http://www.nga.org/Files/pdf/0909HEALTHIERGENERATION.PDF

Local Government Actions to Prevent Childhood Obesity (Institute of Medicine)

Lynn Parker, Annina Catherine Burns, and Eduardo Sanchez, Editors; Committee on Childhood Obesity Prevention Actions for Local Governments; Institute of Medicine; National Research Council http://www.nap.edu/catalog.php?record id=12674#

Connecticut Obesity Council's work on childhood obesity and state policy

Thomas Brooks, Connecticut Commission of Children

Connecticut Department of Public Health Obesity initiatives Mario Garcia, CT DPH

Current and Future Policy Options for Connecticut

Marlene Schwartz, Rudd Center for Food Policy and Obesity

Girl Scouts initiatives re: childhood obesity and health

Jennifer Smith-Turner, President, Girl Scouts of Connecticut

Local program in Danbury re: childhood obesity

Andrea Rynn, Danbury Hospital

ConneCTing with Families initiative and the Fit for Kids pilot program

ConneCTing is a collaboration among pediatric primary care providers to adopt obesity prevention and intervention guidelines/best practices. Fit for Kids was a 2 year pilot program funded by CHDI t o determine the feasibility of a pediatric obesity intervention Cliff O'Callahan, MD, PhD, Director of Nurseries and Family Practice Residency Program at Middlesex Hospital.

http://www.ct.gov/sustinet/lib/sustinet/taskforces/obesitytaskforce/connecting with familes for a healthier future fin.pdf

Federal Nutrition Programs Overview

Lucy Nolan, End Hunger Connecticut! http://www.ct.gov/sustinet/lib/sustinet/taskforces/obesitytaskforce/sustinet-obesity-task-force.pdf

Corner Market and Healthy Food Initiative

Katie Martin, UConn School of Public Health http://www.ct.gov/sustinet/lib/sustinet/taskforces/obesitytaskforce/obesity-task-force-feb-2010.pdf

Connecticut Food Policy Council

Linda Drake, UConn Expanded Food and Nutrition Assistance Program Chair, CT Food Policy Council

http://www.ct.gov/sustinet/lib/sustinet/taskforces/obesitytaskforce/connecticut2010 linda drake.pdf

Appendix B Comparison of a Program to a Policy

Program	Policy
One time	Permanent (as long as law isn't overturned)
Limited reach	Universal reach to everyone
Experimental, not evaluated	Evidence-based
	Can have ripple effect—local becomes state law becomes federal
Doesn't provide default change	Creates optimal default
Focus on personal responsibility	Focus on environmental change
Medical model	Public health model, prevention
Easier buy-in, feel-good	Political, controversial
Not sustainable	Sustainable? Unfunded mandate?
More immediate results	May take years to establish
Often less political	May challenge societal values of individual freedom, e.g. soda tax

Appendix C:

Recommendations from 2008 Statewide Forum.

Endnotes

_ i

http://healthyamericans.org/reports/obesity2010/release.php?stateid=CT

Centers for Disease Control and Prevention (CDC). YRBSS: Youth Risk Behavior Surveillance System. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1999-2007

http://www.cdc.gov/HealthyYouth/yrbs/index.htm.

- vi Finkelstein E, Fiebelkorn I, Wang G. 2004. State-level estimates of annual medical expenditures attributable to obesity". Obesity Research 12(1):18-24.
- Finkelstein E, Fiebelkorn I, Wang G. 2004. "State-level estimates of annual medical expenditures attributable to obesity." Obesity Research 12(1):18-24.
- Swinburn, B., Sacks, G., and Ravussin, E. 2009. Increased food energy supply is more than sufficient to explain the US epidemic of obesity. <u>American Journal of Clinical Nutrition.</u>
- ^{ix} Centers for Disease Control and Prevention. Physical Activity, Physical Education, and Academic Performance: A Review of the Literature. Atlanta, GA: U.S. Department of Health and Human Services; 2010.
- ^x USDA Food and Nutrition Service. Supplemental Nutrition Assistance Program. Annual state level data. Persons participating and average monthly benefits. Available at http://www.fns.usda.gov/pd/snapmain.htm.
- xi USDA Food and Nutrition Service. WIC Program. Annual state level data. Total participation and food costs. Available at http://www.fns.usda.gov/pd/wicmain.htm. xii Food and Nutrition Service, USDA WIC Farmers' Market Nutrition Program
- (FMNP). http://www.fns.usda.gov/wic/FMNP/FMNP2008.htm

 xiii Connecticut Department of Social Services. A list of farmers' markets in CT accepting EBT/SNAP benefits is available at:

http://www.ct.gov/dss/cwp/view.asp?a=2345&q=315396

ⁱ Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1995-2008. Available at http://apps.nccd.cdc.gov/brfss/.

ⁱⁱ Id.

iii Id.

^{iv} Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF), F as in Fat: How Obesity Threatens America's Future 2010, Washington, DC, June 29, 2010

xiv Food Research and Action Center's 2009 School Breakfast Report Card, http://www.frac.org/pdf/breakfast09.pdf

xv www.endhungerct.org

xvi http://www.sde.ct.gov/sde/LIB/sde/pdf/deps/Nutrition/SFSP/SFSP Report.pdf vvii Wansink, B. Mindless Eating.

xviii Austin SB, Field AE, Wiecha J, Peterson KE, Gortmaker SL. The impact of a school-based obesity prevention trial on disordered weight-control behaviors in early adolescent girls. Arch Pediatr Adolesc Med. 2005;159(3):225-230; Austin SB, Kim J, Wiecha J, Troped PJ, Feldman HA, Peterson KE. School-based overweight preventive intervention lowers incidence of disordered weight-control behaviors in

early adolescent girls. Arch Pediatr Adolesc Med. 2007;161(9):865-869.; Neumark-Sztainer D. Can we simultaneously work toward the prevention of obesity and eating disorders in children and adolescents? Int J Eat Disord. 2005;38(3):220-227; Neumark-Sztainer D. Preventing obesity and eating disorders in adolescents: What can health care providers do? J Adoles Health. 2009. 44:206-213; and Schwartz, M.B. & Henderson, K.A. (2009). Does obesity prevention cause eating disorders? Journal of the Academy of Adolescent and Adult Psychiatry. 48, 784-786

```
xix J Am Board Fam Med. 2010 May-Jun;23(3):334-42.
```

xx Proc Nutr Soc. 2010 May 4:1-8.

 $^{^{}xxi}$ Surg Obes Relat Dis. 2005 Jul-Aug;1(4):399-405; discussion 405-7.

^{xxii} J Pediatr Surg. 2009 Oct;44(10):1869-76; Obes Surg. 2010 Jan;20(1):114-7.

xxiii www.babyfriendlyusa.org

xxiv See National Health and Nutrition Examination Survey (NHANES) 2003-2006. Food Frequency Module. See also, Beverage World "State of the Industry Report" (2008).

xxv Yale Rudd Center Revenue Calculator for Soft Drink Taxes. Available at http://www.yaleruddcenter.org/sodatax.aspx.

xxvi Id.

ivxx Id.